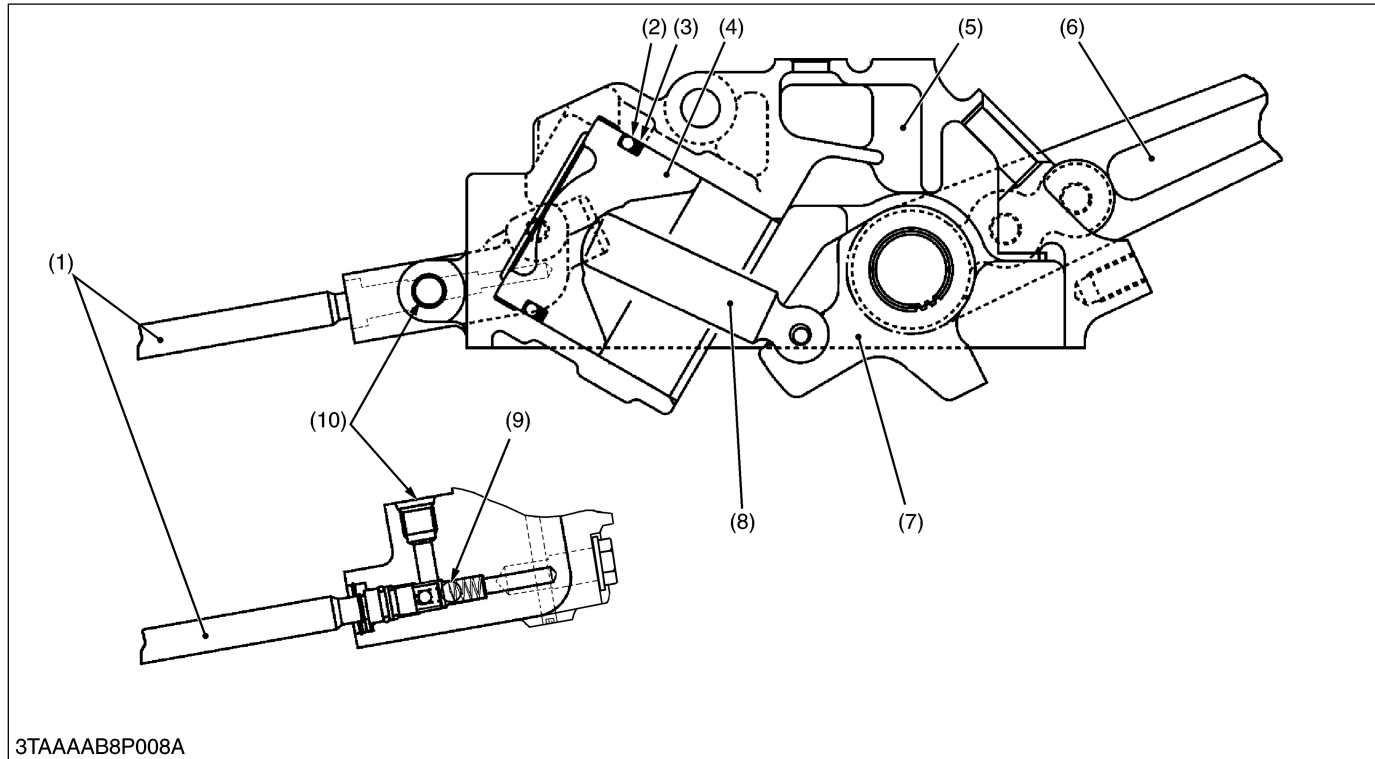


## 6. HYDRAULIC CYLINDER



- |                                    |                        |                   |   |
|------------------------------------|------------------------|-------------------|---|
| (1) Lowering Speed Adjusting Shaft | (3) Back-up Ring       | (6) Lift Arm      | (9) Ball  |
| (2) O-ring                         | (4) Piston             | (7) Hydraulic Arm | (10) Cylinder Port (Connected to Control Valve) |
|                                    | (5) Hydraulic Cylinder | (8) Hydraulic Rod |   |

The main components of the hydraulic cylinder are shown in the figure above.

While the lift arm (6) is rising, oil from the hydraulic pump flows into the hydraulic cylinder through the hydraulic control valve and cylinder port (10). Then oil pushes out the piston (4).

While the lift arm (6) is lowering, oil in the hydraulic cylinder is discharged to the transmission case through the hydraulic control valve by the weight of the implement. At this time, the lowering speed of the implement can be controlled by the ball (9) attached to the hydraulic cylinder (5). Turning the lowering speed adjusting knob clockwise decreases the lowering speed, and counterclockwise increases lowering speed. When the lowering speed adjusting valve is completely closed, the lift arm (6) is held at its position since oil in the hydraulic cylinder is sealed between the piston (4) and ball (9).